The Industrial Labour Welfare Association Ltd.,
COIMBATORE.

Welcome Speech by

Shri G. D. NAIDU,
President, Industrial Labour Welfare Association Ltd.,
Coimbatore.

and Speech by

Shri PATTOM A. THANU PILLAI,
Chief Minister of Kerala.

Vote of Thanks

Shri T. T. R. PILLAI,
Advocate, Coimbatore.

and Letter of

Shri L. G. RAO,
Consulting Engineer, Kakinada.

at TEA-PARTY

on 8th August, 1961

at

"Gopal Bagh", Avanashi Road, Coimbatore.

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Shri G. D. Naidu, President, The Industrial Labour Welfare Association Ltd., Coimbatore got up a Tea party in honour of the visit of Shri Pattom Thanu Pillai, Chief Minister of Kerala on 8—8—61 at Gopal Bagh, Coimbatore.

Shri Naidu in welcoming the Chief Guest, narrated the various industrial developments in Kerala under the present Ministry. He said that Kerala State was wanting in more cultivable lands, and that with a view to meet the demands of the growing population., more industries are to be started.

He gave some suggestions for starting some industries such as manufacture of Ticket Issuing Machines, Tyre factory etc. He also expressed the hope that the Government would come forward to encourage the industrialists to start new industries in Kerala. Mr. Naidu pointed out that enormous funds, energy and time were wasted in our country and that the people should conserve their energy and improve their economic position by starting various industries.

He also presented two reconditioned buses in good working order to the Immaculate Conception Convent, Coimbatore and Sacred Heart Convent,

Tanjore for the use of the school going children, similar to 6 buses which were presented by him a few years back.

The institutions have to deposit a sum of Rs. 5000/- towards a portion of the cost of the body building and the interest derived therefrom would be utilized for awarding scholarships to two of the students of the above institutions, when they take up Home Science Studies.

Shri Pattom Thanu Pillai paid high tributes to Shri G. D. Naidu and said that the Kerala Government would consider the various suggestions and schemes put forward by Shri Naidu. He assured that Coimbatore's need for drinking water would be fully met with by the Kerala Government.

Shri T. T. R. Pillai, Advocate, Coimbatore proposed a vote of thanks on behalf of the citizens of Coimbatore.

Speech by

Shri G. D. NAIDU

Dear Friends,

I want to thank our Chief Guest Mr. Pattom Thanu Pillai, Chief Minister of Kerala for accepting my invitation without any hesitation or excuses. When I went to his office he mentioned that he had been in Coimbatore previously, but could not see me. Perhaps I was not in town then. Ten years back he was here in the same place and addressed a big gathering. Now everyone knows him in South India and in other places, what is Mr. Pattom, how courageous and strong with ripe experience! No where in the world, where Communists once entered in any place, were sent out or defeated. But here in Kerala, Mr. Pattom Thanu Pillai has made the history reversed and the communists were defeated. Not only Communists but also even any other party that comes to oppose, will surely be defeated.

For the last few years, Kerala was going down and down, but at present under Sri Pattom's Ministry it is growing very rapidly in industries as well as in other

activities. Fortunately Kerala has got the most efficient, enthusiastic and industrious Governor, Sri V. V. Giri, to give not only guidance, but also enthusiasm and other help to start any industry by anyone who comes there.

Sometime back the people who got some wealth on hand were leaving Kerala and no one from outside were prepared to go there and start any industry. Now the trend is different.

After an industrial conference held at Bombay, under the able guidance of the Governor of Kerala, Sri Pattom Thanu Pillai, the Chief Minister, and other Ministers invited industrialists from outside to open industries in Kerala. Hundreds and thousands of applications poured in and now many industrialists have already started industries, both outsiders as well as State people.

This shows how rapidly the Kerala State is developing under the above Chief Minister and H. E. the Governor of Kerala. Although the Government have taken so much interest, and although industrialists are very keen to start many industries in Kerala, the development is not still sufficient to feed the population of Kerala.

Kerala State has got many valuable raw materials such as Titanium and other minerals. Pepper, cardamom, cashew-nut, coconut, jack fruit, mangoes, pine apples, bananas, rubber, tea, coffee and several valuable medicinal herbs, teak wood, and rose wood of very high quality and many other forest products are also available in abundance. The State has also got very large fisheries.

There are some plants for preservation of food and fruits. Rubber factories, paper factories, cycle rim and cycle parts manufacturing factories, cycle tyre and cycle manufacturing factories, innumerable coir industries, match factories, ceramic industries, big fertilizer factories, titanium factory, meter factory, instruments and implements factory, soap and oil factories, cashewnut factories and spinning and weaving mills have been started.

Some more factories such as tyre factories, steel rolling mills, textile mills and many other industries are going to work shortly. Amongst these many industries some of them are entirely State owned and some of them are State participated industries.

Then there is a big state owned transport system also. There are also many

indigenous hospitals well known throughout India.

With all these developments as mentioned above, the industrial development is not sufficient to meet the demands of the growing population.

In order to satisfy the needs, the Chief Minister, the Industries Minister, the Transport Minister and other Ministers, of course with the help of the Governor, are trying to get as many industries as possible to be located in Kerala.

Kerala is a partial agricultural State. Though it is producing very valuable crops as mentioned above, food grains are not produced in sufficient quantity. The State has to depend partially on imports of food grains from other states. There is no possibility of expansion of lands for cultivation, as there is not much land left for increasing the agricultural production. Therefore, it has become a dire necessity to develop the industries, big and small.

Last year when I was in Germany, I received a letter from Sri V. V. Giri, Governor of Kerala soon after he came there from Uttar Pradesh. He asked me in that letter to come to Kerala to start as

many industries as we liked and to come there with blue prints.

On account of my crowded engagements in some industries here, I was not able to go to Trivandrum, until last month. Then, myself, my friends Mr. Kannappar and Mr. Gopal Rao, an experienced chemical engineer and two other German students, who have come here for some short term courses in Automobile and Radio Engineering, visited Trivandrum. We visited many of the industries, some towns and other places there. Then we discussed and had interviews with our chief guest Mr. Pillai, Sri Damodara Menon, Industries Minister, Mr. Abdus Salam, Secretary to Industries Department, Mr. Viswanathan Nair, Director of Industries and Commerce, Mr. Madhavan Nair, Director of Transport and some other engineers and officers and business friends.

There were several preliminary discussions about some medium and small industries. Amongst them discussions were made about some of these industries to be started immediately.

There is one meter factory, managed by the State Government. Then the State Transport also is running on extensive

routes with a big fleet of buses. For this transport at present the tickets are not issued by machines.

The State Transport authorities desire to use the Setright ticket issuing machines, which were actually used on some lines for trial purpose, when I was there during the last month.

These Setright ticket issuing machines were used in our bus transport in this place for nearly 30 years. Even before the war, Sir C. P. Ramasami Iyer, as Dewan of Travancore State asked me to introduce these machines when the bus transport was nationalised. But unfortunately at that time, the machines were not available for the requirements.

Then even after the war, by the fear created in the use of some machines in Bombay, no one was dare enough to use them, because of some drawbacks in those machines. But now our Setright machines are found to be the safest and the best amongst the portable machines in our experience of nearly 30 years.

The working of the machines was shown to the authorities there and today the Chief Minister also has seen the factory,

where the Setright machines are manufactured, where all machines are erected and ready for production. He has also seen the machines and how the conductors are using them in the bus service.

Of course, unless actually used, one cannot understand the full advantages of easy operation, economy in time, savings and other expenses.

When I discussed with the Director of Transport, as well as the Secretary, Industries Department and Director of Industries and Commerce, Kerala State they were desirous to use these machines and also to make these machines in the Government meter factory which will be easier for them to make any spare parts and for easy maintenance and quick servicing. I have to decide these points in consultation with the Principals.

Meanwhile, on account of the Foreign Exchange situation, the authorities desire if the machines are available on deferred payment. I am also going to discuss about these points with the principals. In the meantime, I am asking the Director of Transport to send some mechanics and bus conductors for training purpose here at Coimbatore.

Then we had a discussion about the tyres for buses and lorries. A few years back, I applied for a licence for a tyre factory and to import machines worth about Rs. 15 lakhs. At that time the arrangement was to take 10 per cent of the shares, each by the State of Madras, Andhra, Kerala and Mysore and the balance of shares to be given to bus owners and lorry owners. 90 per cent of the tyres consumed in these states were only of 3 sizes and these 3 size tyres will be manufactured to meet out the whole requirements and there would be enormous savings and profits for all the States. Unfortunately the licence was not sanctioned, at that time, as no foreign collaboration was shown to them, even though myself and some engineers who had worked and were trained in tyre factories, were available here.

Now the Kerala Government is interested to start such an economical factory to manufacture atleast to meet out their consumption of nearly 10,000 tyres. They have got already mixing and calendering machines. There is another rubber factory also manufacturing camel back. On account of the existing facilities, a substantial portion of the capital need not be spent now. I am intending to negotiate again for this factory for the Kerala

Government, with my collaboration. I hope the Kerala Government, will be able to get licence even without foreign collaboration. After so many collaborations, the Minister for Industries and Commerce, Government of India, has felt and said that foreign collaboration is not good.

Then there are some other industries also such as for precision tools, dial gauges etc. which may be started with a few more additional machines.

I have agreed for starting an industrial training institute and also a machine tool factory, if they are started some where round about Palghat, taking all responsibilities myself, or if it is started by the Government, I agree, to take the management for 3 years. This may be decided shortly.

Apart from this, many other friends have come forward and applied for some industries such as steel rolling mills, cotton mills, Chemical factories and other factories.

I read in the papers that for the expansion of the Titanium Factory, the British Collaborators are not willing. I also read that some Italian Collaborators are willing.

Now one of my friends Mr. L. Gopal Rao, who is seated here, is an experienced Chemical engineer. He also visited the Titanium Factory at Trivandrum with me. After seeing the News that the British Collaborators were not willing and that the Italian Collaborators are willing for the expansion of the Titanium factory, my friend has written a letter about the Titanium factory and I read here the relevant portion:

"I pondered more over the Kerala Titanium Dioxide plant expansion. I feel that we can not only accept the challenge of the British Firm and carry out the expansion programme without spending one pound in foreign exchange, but a very attractive proposition can be formulated utilising the acid that is at present thrown away. I propose to work out all details and I would like that the matter should be discussed with the Kerala authorities before your departure for Germany. I have therefore arranged to reach Coimbatore with all details by the Blue Mountain Express on the 7th August, so that you could examine the proposition and move the matter with the Chief Minister, when he arrives on 8th."

A factory in Nidadavole is running in which waste products are made into useful products, which can be seen by the authorities. Mr. Rao has given a rough scheme for the consideration of the authorities and he is here.

I am not able to understand for what purpose the foreign collaboration is needed. Is it a scheme to make India a dry country with under employed and unemployed and to make the people float in the air?

I saw in a paper, the figures of collaboration granted in 1960 beginning for 3 months, are more than 275. Ofcourse, we are glad that no collaboration was sanctioned for growing bananas, mangoes or for handloom weaving and for Ambar Charka.

You should not take this as though I am criticising unnecessarily as some party people are criticising the Government for anything and everything. I have not joined any party, but I have leanings towards several parties. Now my desire is to praise some successful enterprises achieved in these few years by the Congress Government. Though the number is very small, we have to praise. When we come to criticise, the criticisms will be 5 times or

10 times more, particularly about the wealth or income, wasted in improper and unnecessary ways and means. As you know more about these things, I don't want to waste your time by enumerating all of them here.

But I want to mention here, amongst the industries small scale industries are most suitable for our country and are urgently needed. For this, the Government and officers are prepared to give advice, loans, licences and all other facilities and they are advertising every day.

Many youngsters are trained every year in the Polytechnics and Colleges. Still many more institutions are going to be started. In addition to this the Government have already started many Industrial Estates and they are going to start many more numbers.

For all these facilities offered by the Government, cent per cent small industries which are required should have been started. But not even 10% have come out. There is a simple reason for the 90% failure. The reason is very simple, which I have told in many places and many times and I have shown to many friends for no useful purpose. But now I don't want to tell

anywhere and here after I don't want to tell any where as I have already experienced with heavy loss of time and funds without any use to any body.

Ofcourse, if anyone is interested and if they have power to rectify and if such persons come here, stay here for a week or two, then I will explain and show confidentially how to develop and spread out small industries to cent per cent of our requirements.

Lastly as a mark of your visit here, as a mark of savings from waste, I want to tell something here.

After the war, my application for an automobile factory was the first one. I was not able to get the licence. Then 2 or 3 years back, when I asked the State Government to give permission to manufacture automobile chassis with most of the parts available here, I was informed that no licence was necessary from the Central Government for small scale industries. Some how or other I have not yet got permission. Almost all the State Government and other big fleet bus owners are selling away their buses after a service of 5 to 10 years. Most of them are bought by scrap merchants and some parts are sold as

parts and most of the materials used as scrap iron and even exported to other countries.

Here I have some firms running altogether 50 buses. After 1942 only 15 new buses were purchased. All the other buses were purchased from the sales or auctions of the scrap buses and made into better than new buses and are running more efficiently than the new buses. It can be seen practically.

Ofcourse after regular continued service some buses have to be stopped, which are not useful for long distance service. Such of the buses can be used for short routes, as well as in towns.

In 1952 six of such buses, stopped from service, were taken by this association at a very cheap price and given to some convents to carry their school going children from their houses to schools, on a condition that they have to pay half of the charges for building a body, amounting to about 5000 rupees.

On receipt of this amount these buses were given to the convents. Otherwise they have to shell out for a bus not less than 35,000 to 60,000 rupees.

In this way they get a bus as one kept outside, for Rs. 5,000. The bus was given in 1952, and it is now 9 years over. This is the 10th year and will be stopped in the next month and this bus is also kept outside.

After receiving this amount, the same is given for Government bonds and the interest given as scholarships for 5 or 6 children in that convent when they go out to study home science, in the name of some leading persons.

In this way in 1952, six buses were given and 2 of the buses have become very old after 9½ years of useful service. For these two convents I am giving these two buses as a mark for this day.

I have sent word to these convents and the Mother Superiors have come here to take them. Ofcourse they did not ask, but I have asked them to take. My nature is not to give when they ask, because numberless demands will come. Here also I don't want to give these buses openly, as I know I will receive hundreds of letters from tomorrow for buses, for which I have to reply with the words "Sorry, No".

Then you can ask why it is given here today. My reply is to show that how we

can save from the waste and how we can waste from the savings.

Now I am doing my duty to give it to others what I have learnt as useful and with no other motive.

Previously six buses were given to the following Educational Institutions and the prizes were awarded to the students in the name of the leaders noted against each.

1. Stella Mari's College, Mylapore, Madras.	1. Sir R. K. Shanmugham Chettiar. 2. Sir M. Visvesvaraya.
2. Nirmala College, Coimbatore.	1. Sir R. K. Shanmugham Chettiar. 2. Sri V. C. Vellingiri Gounder.
3. St. Rapheal's Girls' High School, Mylapore, Madras.	1. Sir C. V. Raman. 2, Sri C. S. Rathnasabapathy Mudaliar.
4. Sacred Heart Girls' High School, Srivilliputhur.	1. Sir M. Visvesvaraya. 2. Sri T. A. Ramalingam Chettiar.
5. Govt. College of Technology, Coimbatore.	1. Sri T. A. Ramalingam Chettiar. 2. Sri C. S, Rathnasabapathy Mudaliar.

6. Sacred Heart Girls' High School, Tanjore.	1. Sir C. V. Raman. 2. Sri V. C. Vellingiri Gounder.

Now these two buses will be given to the following schools through the:—

1. Mother Superior,
   Immaculate Conception Convent,
   Coimbatore.
2. Mother Superior,
   Sacred Heart Convent,
   Tanjore.

Now the scholarships will be given in the names of the following gentlemen:—

1. H. E. the Governor, Shri V. V. Giri.
2. Shri K. A. P. Visvanathan.
3. Shri Venudaya Gounder,
   Sangarandampalayam Pattagar.
4. Shri Pattom A. Thanu Pillai.

Then two other buses will be given within the end of this year. The scholarships will be given in the names of:—

1. Dr. P. Subbarayan.
2. Sir P. T. Rajan.
3. Sri B. Gopal Reddy.
4. Sri K. Kamaraj Nadar.

With these few words I thank you again for your very kind visit here. I thought at first that we both may have engagements for the whole 24 hours. Subsequently with some engagements with the Rotary Club and some parties at Singanallur have robbed away much time. Therefore I request you to excuse me for allowing some other engagements and spending your time.

My whole hearted thanks to all friends here.

Speech by

Shri Pattom A. Thanu Pillai,

Chief Minister of Kerala.

I do not know how to express my thanks adequately to Mr. Naidu and also the friends that are here this evening. You all know Mr. Naidu better than I know him. I know him as a genius, I think you will agree with me. To-day he took me round and showed his factories and I was able to gather that he is really an extraordinary man, whom our young men should try to emulate. He came to Trivandrum recently and invited me to come here and spend a day with him. As he told you, I readily agreed for more reasons than one.

A person who is really an example to others has necessarily to be listened to, because we want men of that type in our country. Secondly I am deeply interested, naturally in the industrial progress of our country, and I thought I would profit by responding to his call and I am thoroughly satisfied that a day spent with him is very profitably spent. I don't want to praise him merely for the sake of praising. He is interested in the Industrial progress of the

country, and I want for my state the cooperation of men of his type. He told us that if somebody asks him he won't give. So I am diffident to suggest that he should think of doing something in the industrial field in Kerala. I think in this case he would not refuse.

(*Mr. G. D. Naidu* – So you have asked and I have already come and offered.)

Therefore there is no fear of my losing anything. He has already agreed and that is true, as in the case of these two buses. I do not know whether you have all seen these two buses, except from a distance.

They appear to be new buses and I am told that they are 1942 model. Then I wonder if he can make old men young. (Applause). I would request him.

(*Mr. G. D. Naidu* – For that also there is a medicine.)

While he is engaged in industries and industrial development of the country, he would do well to think of making the old people young.

I tell you these two buses look quite like new ones. Mr. Naidu told me that

these buses had been in his service for about 15 years. Am I right? From 1946 onwards and now these buses are yet to put in a service of over 9 years to 10 years. That is something really marvellous, I must say!

After 4 or 5 or 6 years, costly buses are condemned. That condemnation means loss of good deal of money to the owners. If it is State Transport Buses, so much money lost in the State. I was wondering why Government did not make Mr. G. D. Naidu an all powerful General Director of all transport concerns in India. (Applause). I don't expect him to work for a pay, but then if his genius were available, how much money could we save. I don't think the buses that he repairs, rebuilds, and puts up on the road, they are not let to untoward incidents or accidents. They are serving as well as new buses. Am I not right?

(*Mr. G. D. Naidu* – This service has the lowest accidents in the whole world. We can give records.)

With regard to the Setright ticket machine, Tyre industry and Machine tool industry. I don't want to go into details, either about that machine or the industries. All that I can now say is, whatever he

offers, whatever he puts forward, the Kerala Government will certainly be prepared to take all his suggestions and all proposals, because we want to take advantage of the services of an industrialist, an originator like Mr. Naidu. He mentioned good many things about the industries in general and the industrialisation of Kerala. He also gave you many facts about Kerala. I am thankful to him for having made such a deep and accurate study of conditions in my state and his readiness to help the State in the field of industrialisation.

It is very true that Kerala is not producing all the food she needs. In fact we are producing only 40 to 50% of our rice requirement. You may know Kerala is the most over-populated State in India. She has a population of 1100 per sq. mile, taking into account all the forest areas and the water logged areas, as well as the occupiable area. If we had only the normal rate of population of India, we would not have been deficit in food production. But then in spite of all talk about birth control, birth is one of those things that it is not easy for men to control nor for women to control. We are making an attempt to control the growth of population. We are just making a beginning, but Madras does

not suffer from that kind of malady. We can't say Madras is over-populated like Kerala. It is not like Kerala.

All the same we are trying to produce as much food as possible. If we can double the production the situation will be quite all right. But you know doubling food production without extending the area of cultivation is a very difficult thing.

As Mr. Naidu said we have no land to bring under cultivation as almost all area available for cultivation is already cultivated. So it is only intensive cultivation that can help us. We are doing our best to increase production with the available land. Therefore he has rightly said that industrialisation is a matter of greater necessity in Kerala than in other States. We have not progressed much in that direction. But there also we are trying to improve matters. Of course you know many pre-requisites have to be satisfied, before we can industrialise a state like Kerala. In the matter of big industries there must be men with money to start industries. We have not got men like that to start in Kerala itself, so the co-operation of persons outside the State is required in large measure. It is there that I would appeal to friends here who are interested in

industries, who can invest money, who have got the requisite knowledge and opportunity and also the desire to advance the interest of the country generally.

Then I appeal to them to keep in mind the needs of the neighbouring state of Kerala and also to help them. So if any part of India should advance and maintain that advancement all parts of India, should participate in that advance.

India is one and we cannot afford to neglect any part of the country, unless we are prepared to take the consequences. We have to think of the country as a whole and do our best in every way possible to advance further in general interest.

You hear a good deal now-a-days, of the fissiparous tendencies that are visible in many parts of the country and the dangerous consequences, if we do not check those tendencies. That is a matter that should engage the attention of all lovers of country. We should certainly cease to think in terms of communities and communal groups or religious groups and groups of other kinds. We will certainly learn to think India as a whole and consider ourselves as Indians before everything else.

Now I don't want to expatiate on that matter further. As for the matters that were mentioned here the proposals of Mr. Gopal Rao – certainly his proposals – will be highly appreciated and will receive the utmost attention of the Government of Kerala. I don't want to say anything further on this occasion. I am thankful not only to Mr. Naidu, but all of you as I said already for the reception accorded to me and this party that has been got up here. We belong to the same country, we are citizens of India and all of us here belong to two neighbouring states.

Your interests are the same as the interest of Kerala, but the appreciation of that fact on the part of all of us will certainly help the advancement not only of the two states, but of the counrry as a whole.

I tell you I am deeply touched by the good feeling that I see here. I thank you all once again.

Mr. G. D. Naidu: Mr. T. T. R. Pillai to give thanks to our Chief Minister here for agreeing to give the Siruvani water, whatever amount we want and for that we can do whatever work there. The Municipal Chairman, - has come here and he asked and he agreed.

Now at the same time I ask for the Periyar Water also. Whatever amount of water goes to the Arabian Sea, he agreed to give and in place of that he wanted rice from here.

Sri Pattom Thanu Pillai: Water for drinking purpose is concerned, Coimbatore's needs certainly will be fully met (Applause), and for other matters the position is not exactly what Mr. Naidu told you, but is a matter for investigation, by examination by specialists and the Chief minister of Kerala should not be taken to have made any commitment in regard to that. Because it is something that is not expected of any Chief Minister to make commitments that way. But as for drinking water for Coimbatore, the Chief Minister is definite that Kerala will be as helpful as is expected.

Mr. G. D. Naidu: Mr. T. T. R. Pillai will give thanks on behalf of the Citizens of Coimbatore.

Vote of thanks by

Sri T. T. R. Pillai.

Mr. Pattom Thanu Pillai
Ladies and Gentlemen,

Consistent with the nature and quality of our distinguished host, he has sprung a surprise not only on you, but also on me. Believe me, he has not given me even two seconds' notice, that you confer upon me a desire of proposing a vote of thanks.

Well one of the most distinguished citizens of our country is our chief guest. So you know we cannot refuse Mr. G. D. Naidu. So I shall endeavour my utmost to express on behalf of the citizens of Coimbatore our most grateful thanks to Mr. Pattom for having taken the trouble of going over here to-night and having made such a very thoughtful speech. We Coimbatorians are naturally interested in the affairs of our most neighbourly state, not so much for the fact that the Siruvani starts in Kerala.

So far industries are concerned, on behalf of the citizens of Coimbatore, Sir, we assure of our steadfast services.

If I am not blowing my own trumpet, perhaps it may of interest to the Chief Minister of Kerala State, that I myself am associated with some of the most important industries, not as a managing agent, but as a director. Until the other day, Sir, I had the honour of being the President of the Aluminium Factory, Kundara. I am also director of many rubber, tea, and coffee plantations in your parts. I have come there having rejoiced your hospitality.

One of our own men Mr. T. R. Ramanathan, whom you will probably meet to-night, the past president of the Rotary Club, I am told, he is launching certain schemes for starting reeling rolls, textile and card-board factories. That shows how we are interested in the development of the neighbouring state.

Of course, you will be lucky in your own interest and in the interest of your country, if you can utilise the services of

Mr. G. D. Naidu, whom you have so correctly, aptly and accurately described as a real genius in the country. His services are at your disposal. Before I conclude, Sir, I feel it my duty, to thank you specially for having laid emphasis upon the fact that the happiness and the harmony of the whole country depends upon the well being of the smallest state.

Once I think, even I remember to have said that the "Shortest Governor of the Smallest State", is I know Mr. Ramakrishna Rao.

The State may be small, but the people are so intelligent, so industrious and until recently the fear had been that those industrialists were always afraid of labour trouble. Their impression, rightly or wrongly, that your state people–workers are called on to strike and things like that. In fact a few years ago I myself know that wealthy people from your parts came here and began to invest their money and purchased properties with the result all of our properties shot up in value, though my impression was that there was no confidence

in the well being of your own state and came over here.

Fortunately for you that impressions have changed. In fact the Coimbatore industrialists are very willing to invest their wealth in that place and therefore I see a great future for Kerala State, because we are convinced that the happiness of Tamilians is inter-linked, inter-woven indelible, very strongly linked with your state.

Thank you sir, for your very considerate and generous speech you have made and for your promise and with these words I once again thank you and all friends, who have assembled here, so that the function has been such a great success.

Sri L. G. RAO,
Consulting Engineer.

Gopal Bagh,
Coimbatore,
Dt. 7—8—1961.

TRAVANCORE TITANIUM PIGMENTS.
An Abstract of Suggestions.

The proposed foreign collaboration for the plant expansion does not appear to be indispensable. The factory is a long established one, all the process operations have been thoroughly standardised and the plant and equipment does not present any problems in duplication or redesign to increased capacity. Indian plant fabricators have undertaken more formidable jobs such as the duplication of the Sindri factory at Nangal.

The plant, if fabricated in India, would cost only half that of an imported plant. In as much as foreign financial collaboration, if any, could not exceed 49% Indian fabrication would enable Govt. to carry out the expansion program at no more than the parity capital investment that would be necessary under foreign collaboration.

The acid effluent containing at present 40 tons of sulphuric acid per working day could be processed to yield.

Iron oxide pigments	2,000 tons
Blanc Fixe	12,000 tons
Magnesium Sulphate	9,000 tons
Manganous Sulphate	6,000 tons

per annum; and these products could be easily marketed in India or abroad, fetching an annual nett revenue of the order of Rs. 60 lakhs with a total investment of Rs. 75 lakhs.

Proposed Expansion Program.

Announcements have appeared in the press that negotiations with the British collaborators of the company for expansion of the plant capacity from 10 tons per day to 68 tons per day have proved futile and that Government are anxious to conclude alternative arrangements for collaboration.

The objection of the British firm, namely, that the products of T T P might enter world markets, appears to be levelled against Indian national interests. The situation offers an incentive for reviewing the very case for any foreign collaboration. The present plant has been in operation for about a decade and the manufacturing operations have been thoroughly established. The program of production of rutile dioxide also is well under way and no insuperable difficulties are anticipated in the realisation of this program. The plant and equipment is of stereotyped character and admits of easy duplication in India or, if need be, import from well known manufacturers abroad. In the circumstances one is apt to believe that

foreign collaboration could be easily dispensed with.

This appears to be a fit case for application of our Prime Minister's oft repeated dictum that any machine could be imported into India only once. Japan has followed the principle with the utmost rigidity with results that have amazed the world. India too, the giant chemical plant of Sindri is being successfully duplicated at Nangal and offers an object lesson for T T P.

Chemical Plant construction in India has advanced to a stage when plant of the type and size found in the T T P could be ordered with the utmost assurance with ample guarantee of performance and promptness in delivery.

Financial Collaboration

It is not clear if Government have been looking for financial collaboration from The British Titanium Products. Under national regulations such collaboration could not possibly exceed 49 per cent. This is the order of economy in plant cost if the plant and equipment were to be fabricated in India instead of being imported from abroad. In other words, if the idea of foreign collaboration is altogether dispensed with, the expansion program could be carried out at no more

than the parity capital investment that Government would have to invest under the scheme of foreign collaboration; and the country would be saved from the recurring claims of foreign investors.

If at all Indian financial collaboration is needed, it could be had for the asking. The writer of this note is aware of certain industrial groups in the country who would be eager to avail of opportunities of this kind. While this would be the lesser of the two evils, it is strongly urged that no private financial participation is contemplated in this case, in as much as the prospects of the industry bid fair to the rehabilitation of the state economy as well as national economy in the shape of Rs. 2 crores per annum to the State exchequer and twice this sum accruing in foreign exchange. Titanium white has assumed paramount importance in industry and the market for this product is so assured that one might venture the suggestion that in national interests the state might discontinue the export of ilmenite which is known to be the richest in the World.

Utilisation of Acid Effluent from Travancore Titanium Products.

The Proposition in Outline.

The Travancore Titanium Products at present employ for their process needs 40

tons sulphuric acid per working day; and this acid in the form of ferrous sulphate or in the free condition but in very dilute state is let off an effluent at the end of the process. The acid may be valued at Rs. 5,000 per day and it is not beyond the bounds of possiblity to institute measures for the recovery of about 2/3 of the acid as such for reuse in the process. Alternative measures are however available for the conversion of the acid into commercially valuable sulphates that could be easily marketed in India or abroad to fetch a daily nett return of the order of Rs. 20,000. These processes have been developed on a commercial scale in a chemical works in Andhra Pradesh, Chemicals Ltd., Nidadavol, and would be easily adapted to the conditions obtaining in The Travancore Titanium Products so as to yield, on commercial exploitation, a daily nett profit of the order of Rs. 20,000 or about Rs. 60 lakhs per annum.

The market possibilities of the products and the ways and means of setting about the project are discussed in the following pages. Investigation of the possiblities on a laboratory scale would be gladly undertaken by Chemicals limited referred to above and an outline scheme formulated. A pilot plant could then be set up at an estimated cost of Rs. 1½ lakhs to yield

within 3 months complete engineering data for the design of the final plant. On the basis of experience of similar projects it is confidently hoped that the entire plant could be fabricated in India and commissioned to production within 6 months of the completion of the pilot plant investigation or 9 months from the completion of the laboratory work. The author of this note, who has been associated with Chemicals Ltd. since its inception 12 years ago, has great pleasure in offering Technical collaboration for the development of the project that might go a long way in the context of national economy.

Market for the Products.

The products so far developed from ferrous sulphate containing free sulphuric acid are precipitated iron oxide pigment and commercial sulphates of Barium, Magnesium, Manganese, Zinc, Aluminium and Copper. Of these products the last three suffer from certain limitations in the matter of availability of the requisite raw materials or marketability of the products and will be therefore excluded from consideration for the present.

Precipitated Iron Oxide Pigments:

Red and brown pigments of this class are in great demand in the country for use in coloured cements and paints but are

mostly imported except for limited production by a single manufacturing firm, chemicals limited cited above. The Indian demand is of the order of 10,000 tons per annum at Rs. 1,000 - 1,200 per ton. The effluent from T T P would yield about 2,000 tons per annum and the nett sale proceeds are assessed on conservative basis at Rs. 700 per ton.

Barium Sulphate or 'Blanc' Fixe:

Is a material of extreme importance for the paint industry totally imported so far. Due to paucity of imports many paint manufacturers seek recourse to the use of snow white barytes mineral ground and air floated to 300 mesh. While 20,000 tons or more of Blanc Fixe could be easily sold per year at Rs. 600/- per ton, unlimited tonnages could be sold at half the price as it would be only slightly higher than the ruling price Rs. 250/- per ton for the substitute, snow white barytes. It is proposed to manufacture 12,000 tons of Blanc Fixe per annum and the nett sale proceeds are assessed at Rs. 300/- per ton.

Magnesium Sulphate or Epsom Salt:

The familiar purgative in pharmacy of which there is enormous production and sale in the country, perhaps 50,000 tons per annum for pharmaceutical purposes.

Besides pharmaceutical uses, mag-sulph of commercial purity is employed in larger tonnages in tanning and for weighting silk and cotton textiles. The average price of this commodity is Rs. 400 – 450/- per ton. It is proposed to manufacture from the effluents of T T P 9,000 tons per annum and the nett sale proceeds are estimated at Rs. 250/- per ton, safe margin for competition and for offering, if necessary, for commercial purposes.

Manganous Sulphate :

A product of comparatively recent development for supplying the trace elements for plant growth but increasingly in demand for the production of electrolytic manganese metal which is a strategic material for the production of aircraft metals and other super-tensile non-ferrous metals. The Indian demand for manganous sulphate is small and is at present met by the only manufacturers, Chemicals Limited; but contacts have been established with overseas buyers whole requirements are enormous either for daily use or for stock-piling. The ruling prices in the U. K. and the U. S. A. Markets are over Rs. 1,000/- per ton on water free basis. It is proposed to make a beginning with 6,000 tons per annum and to assess the nett sale proceeds at only Rs. 500/- per ton to provide for

shipping charges, ocean freight, insurance import tariffs etc.

It will be gathered from the foregoing that the products selected for manufacture from the effluent are likely to command ready sale and in the manufacture of which chemicals limited are particularly competent. The manufacturing processes have been developed and standardised for years and it is only necessary to evolve minor modifications that might be called for by the special characteristics of the effluent.

The production envisaged would comprise:

Iron oxide pigments	2,000 tons
Barium Sulphate	12,000 tons
Magnesium Sulphate	9,000 tons
Manganous Sulphate	6,000 tons

which is considered a convenient sales programme to start with; but it may be added that the production program could be easily altered in any desired ratio of the various sulphates to suit market requirements. Iron oxides of course cannot be altered.

Plant and Machinery for the Project:

The process operations do not call for any plant or equipment of special

complexity to warrant import from abroad. It would consist of grinders, mixers, reacting, kettles, filters, evaporators, crystallisers and rotary driers and centrifugals such as found in daily use in sugar factories, only smaller in size and output. It is well known that sugar plant equipment is no longer imported into India, The proposed technical collaborators possess adequate experience of design and fabrication of such equipment and are in a position to make satisfactory arrangements with manufacturing firms in India to supply the plant to specifications in stipulated time. The bulkier items may be conveniently fabricated at site; and the writer has noticed with satisfaction that contractors have been actually fabricating tanks and kettles in the T T P premises.

The probable cost of plant and equipment is a matter for detail study and calculation after the manufacturing program has been finalised and the pilot plant work completed. A very tentative 'forecast', rather than estimate, may be ventured along the following lines for preliminary guidance.

Plant, equipment and buildings	Rs. 60 lakhs
Working capital requirements	Rs, 15 lakhs

Probable daily nett sale proceeds:

Iron oxide pigments 7 tons at 700 per ton	Rs. 5,000
Barium Sulphate 40 tons at 300 per ton	Rs. 12,000
Magnesium Sulphate 30 tons at 250 per ton	Rs. 7,500
Manganous sulphate 20 tons at 500 per ton	Rs. 10,000
	Rs. 38,500

Estimated daily production costs:

50 tons off-grade Barytes lump	Rs. 3,500
25 tons Magnesite in lump form	Rs. 1,500
40 tons rejected 30% manganese ore	Rs. 2,500
20 tons lignite or coconut shells	Rs. 1,000
Fuel charges	Rs. 2,500
Power and Water charges	Rs. 500
Packing charges (gunnies)	Rs. 2,000
Labour, supervision and miscellaneous	Rs. 1,000
10% depreciation and 5% maintenance	Rs. 3,000
Interest and unforeseen items	Rs. 500
	Rs. 18,000

Daily nett surplus	Rs. 20,500
Annual nett profit	Rs. 61.5 lakhs.

Suggested Plan of Work.

A carboy of average effluent may be despatched to Chemicals Ltd., Nidadavol, S. Ry. to enable them to carry out laboratory tests and compile a scheme for pilot plant investigation, which in turn would lead to a complete project report. On scrutiny of the project report a firm decision could be arrived at on the economics of the scheme and whether departmental investment is justified or financial collaboration is to be enlisted. If departmental investment is ruled out in any case, a commercial scheme could be formulated on the basis of laboratory test leaving it to entrepreneurs to put up their own pilot plant.

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